TO TRANSMIT OPTICAL SYSTEM TRANS-MITTED LIGHT **IDLER LIGHT** PUMPING LIGHT 67 MgO:PPLN 99 TRANSMITTED LIGHT PUMPING LIGHT **IDLER LIGHT**38 65 MgO:PPLN 64 SPACE TYPE OPTICAL AMPLIFIER 62 PUMPING^L LIGHT 63 PUMPING LIGHT SOURCE TRANSMITTED LIGHT TRANSMITTING OPTICAL FIBER